ZERO EMISSION TRANSPORTATION ASSOCIATION

Summary of the U.S. Access Board's Proposed Rulemaking on EV Charging Station Accessibility

Docket Number: ATBCB–2024–0001
Agency: Architectural and Transportation Barriers Compliance Board
Action: Notice of Proposed Rulemaking
Comment Deadline: November 4, 2024
***Federal Register* Page:** Here

Key Links

- NEVI Final Rule (February 28, 2023)
- Technical Assistance Document: Design Recommendations for Accessible Electric Vehicle Charging Stations (July 17, 2023)
- Preliminary Regulatory Impact Assessment: U.S. Access Board Accessible Electric Vehicle Chargers (September 3, 2024)

Overview

On September 3, 2024, the Architectural and Transportation Barriers Compliance Board ("Access Board") issued a proposed rulemaking to set minimum guidelines for making EV charging stations accessible to and usable by persons with disabilities. This includes both physical access to the EV charging station and access to the interface to operate and pay for the charging session. The proposed minimum standards have potential implications for site design and product design.

Under the Americans with Disabilities Act (ADA), the Access Board is required to create guidelines for the accessibility of buildings, facilities, and vehicles. Subsequently, the Department of Transportation and Department of Justice must then incorporate these guidelines into their ADA regulations as accessibility standards consistent with the Access Board's minimum guidelines. Facilities designed, built, altered, or leased by applicable federal agencies (Department of Defense, General Services Administration, Department of Housing and Urban Development, and the U.S. Postal Service) must also adopt accessibility standards consistent with Access Board guidelines.

The proposed Access Board guidelines require every charging station with 25 or fewer spaces to include at least one accessible charging space reserved only for individuals with disabilities displaying a state-issued disability placard. The Access Board is also considering a "use last" model, whereby each charging station with 25 or fewer charging spaces would require two or more accessible spaces, but which could be used by people without disabilities if all other spaces are occupied. Other proposed guidelines impact the location of accessible spaces within charging

stations and sites, physical dimensions of accessible charging spaces, and communication features of EV chargers such as volume, status indicators, caption processing, and color coding.

Scope
Once finalized by the Access Board and adopted by the relevant enforcement authorities, all newly constructed EV charging stations would need to be fully compliant. This would include stations funded under the NEVI program (and potentially CFI depending on timing) in addition to publicly-accessible privately-funded stations. Existing charging stations would need to be made compliant as they are altered in the future, to the maximum extent feasible if existing physical constraints prevent full compliance.

Timing
The Access Board is receiving comments through November 4, 2024. After reviewing the comments, the Access Board would need to respond and finalize the proposed regulations, at which point other Agencies (e.g., DOT and DOJ) would need to amend their regulations through separate rulemaking before these guidelines become enforceable.

While the upcoming election introduces uncertainty regarding the timing of a final Access Board rulemaking, it is worth noting that the last time DOT adopted Access Board guidelines into its ADA standards was in 2006. That process took about three months and appears to have been mostly pro forma, although a public comment period was made available.

Summary of Access Board Proposed Guidelines for EV Charger Accessibility

Definitions

- Charging Port: The system within an EV charger that charges one (1) EV. A charging port may have multiple connectors, but it can only provide power to charge one EV through one connector at a time.
- Connector: The device that attaches an EV to a charging port in order to transfer electricity.
- Electric Vehicle: A motor vehicle that is either partially or fully powered on electric power received from an external power source. Definition does not include golf carts, electric bicycles, or other micromobility devices.
- EV Charger: A device with one or more charging ports and connectors for charging EVs. An EV charger is also called electric vehicle supply equipment (EVSE).
- EV Charging Space: A space to park an EV while charging. An EV charging space may be a marked or an unmarked area adjacent to an EV charger.
- EV Charging Station: The area in the immediate vicinity of a group of EV chargers including the EV chargers, supporting equipment, EV charging space adjacent to the EV chargers, and lanes for vehicle ingress and egress.

Scoping, Site, and Building Requirements *- apply to accessible EV charging spaces*

Accessible Routes

- Adds accessible EV charging spaces to a list of areas from which an accessible route must be provided to an accessible building or facility entrance.
    - Requires at least one accessible route that connects the accessible EV charging spaces to accessible buildings/facilities.

Signs

- Accessible EV Charging stations must be identified with a sign.
    - Two exceptions:
        - When a total of four or fewer charging spaces are provided.
        - If the space is assigned to a specific residential dwelling unit.

Minimum number of charging spaces required to be accessible

- Required number of spaces under "reserved" system would be:
    - 1 space for <25 space stations (which account for 99% of charging stations), with stations over 25 following the model shown by the table below:

TABLE 249.3.1—EV CHARGING SPACES

Total number of EV charging spaces provided at an EV charging station	Minimum number of required accessible EV charging spaces
1 to 25	1.
26 to 50	2.
51 to 75	3.
76 to 100	4.
101 to 150	5.
151 to 00	6.
201 to 300	7.
301 to 400	8.
401 to 500	9.
501 to 1000	2 percent of total.
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000.

    - The table is identical to the Access Board's minimum requirements for accessible parking spaces, presented to EV charger operators in the Board's 2023 Technical Assistance Document.
- If two or more EV charging stations exist on the same site, they are treated separately.
- EV charging spaces are also scoped separately if chargers of different levels are included at an EV charging station.
    - I.e., an EV charging station with four DCFC and four L2 chargers would have one accessible space required for each type of charger.
- Parking spaces and EV charging spaces are scoped separately for each site.
- Separate requirements for residential dwelling units

    - At least one accessible EV charging space should be provided for each dwelling unit required to have mobility features, if one space is provided for each dwelling unit. If not, requirements will follow those for other public charging stations.

Location

- Accessible charging spaces that serve a particular building/facility shall be located on the shortest accessible route from the EV charging station to the accessible entrance.
- Exceptions: At sites with multiple charging stations, more than otherwise required accessible charging spaces are allowed at a single charging station if greater accessibility would result.
    - I.e., having two accessible spaces in one station and none in the other if the first station is closer to the accessible entrance in question.

Mobility Features

- A person using a mobility device, such as a wheelchair, must be able to remove a connector and plug it in, initiate charging, and access interactive screens.
- Technical specifications are provided for:
    - Clear floor or ground space: allows for a parallel approach to an EV charger
- Reach range and operation: operable part must have an unobstructed side reach
- Operable parts: includes the EV charging connector, screen provided with the charger, and components that activate or deactivate the EV charger.
    - The rule is exempted for gas nozzles due to safety concerns but is not exempted for charging connectors.

EV Charging Spaces

- Size of Accessible EV Charging Space:
    - Vehicle space with a max width of 132 inches (11 feet) and a minimum length of 240 inches (20 feet)
        - Traditional accessible parking spaces are 8 feet wide.
    - This is larger than traditional accessible parking spaces due to the need to maneuver around the vehicle to access the inlet location and the charger.
    - Two exceptions, which apply to pull-through charging stations:
        - These spaces can lack an access aisle as long as they are 192 inches wide and provide for an adjacent vehicular way of maneuvering
        - The Board is also considering an exception for inductive charging stations.
- Access Aisle: (same physical requirement as for accessible parking spaces)
    - Two EV charging spaces may share a common access aisle
    - Minimum of 60 inches wide - same as for traditional accessible parking spaces.
- Floor or Ground Surfaces
    - Must be stable, firm, and slip-resistant

- Vertical clearance
    - Minimum of 98 inches (8 feet), same as for accessible parking spaces.
- Identification
    - Identified with the International Symbol of Accessibility
    - Not required if four or fewer charging spaces are located at each site.
- Relationship to accessible routes
    - The design of EV charging spaces and access aisles should be designed to not obstruct accessible routes. This can be accomplished through wheel stops.

Communication Elements and Features - *apply to all EV chargers, except where noted*

EV Charger Communication Elements and Features

- Volume
    - All EV chargers that deliver sound must provide volume control and output amplification.
- Display screen
    - Must be visible from a point located 40 inches above the center of the clear ground space - *only applicable to EV chargers associated with accessible EV charging spaces*
    - Must provide at least one mode of characters displayed on the screen in a sans serif font.
        - If no screen enlargement features are available, characters must be 3/16th inch high.
- Status indicators
    - Should be discernible both visually and by touch or sound.
- Color coding and audible signals
    - Audible signals and color coding cannot be used as the only means of conveying information.
- Two-Way communication
    - EV chargers with two-way communication, such as help desks/video chats with representatives, must provide an accessible means of communication for people who are deaf or hard of hearing
- Caption Processing Technologies
    - If a charger displays or processes video with audio, captioning of the audio shall be provided.

"Use Last" Approach

- The Access Board is considering an alternative model to the 'reserved' approach proposed in the scoping section.

- Under the ‘use last’ model, accessible EV charging spaces can be used by anyone if all other spaces are occupied. The number of accessible charging spaces per charging station would effectively double:

TABLE 249.3.1—EV CHARGING SPACES

Total number of EV charging spaces provided at an EV charging station	Minimum number of required accessible EV charging spaces
1	1.
2 to 25	2.
26 to 50	4.
51 and over	4, plus one for each 50, or fraction thereof over 50.

- The ‘use last’ model was first introduced in the Access Board’s Technical Assistance Document, published in August 2022.
- The Access Board changed the ‘use last’ model to an alternative proposal due to “significant reservations” about the approach. Namely, the Board is concerned that enforcement will be “difficult, if not impossible.” Its reservations are as follows:
    - Hard to determine if an accessible space in use by someone without a disability was the only one available at the time that the person arrived.
    - People without disabilities may prefer to use ‘use last’ spaces due to their bigger size.
    - “Use last” is a new concept, and may lead to confusion for drivers.
        - Seeking comment from any EVSE operators currently using the use last approach.
- The Board is seeking public comment on this alternative, “especially from any jurisdiction or EV charging station operator that is currently using the ‘use last’ approach. The Board is particularly interested in information regarding enforcement and wait times for individuals with disabilities attempting to use the accessible spaces.”
- The “use last” alternative would be at most $113 more expensive per charging station for the most common types (<25 spaces) outside of California.
    - Costs would increase by $0-1,600 per charging station in California, due to the state having already adopted accessible EV charging standards.
- According to the Access Board’s Preliminary Regulatory Impact Assessment (PRIA), “even if 50 percent of users without disability placards use the accessible spaces inappropriately, the ‘use last’ alternative *results in lower probabilities of people with disabilities waiting for accessible spaces than under the ‘reserved’ model because the number of required accessible spaces is greater.*”